The source of the initiatives in this database is Westinghouse Savannah River Company's Productivity & Cost Effectiveness (PACE) program. Westinghouse Savannah River Company, LLC (WSRC) is a subsidiary of the Washington Group International, Inc. PACE was established to institutionalize one of the company's imperatives, cost effectiveness of operations. PACE initiatives are found throughout every organization, process and procedure with which the company is involved at the Savannah River Site. PACE initiatives must be completed without jeopardizing safety, work scope or performance schedules.

The Reengineering and Cost Effectiveness Department maintains this web page, and is charged with the administration of the PACE program, including providing assistance in the development of initiatives, providing reengineering assistance where necessary, monitoring and reporting initiative progress and tabulating final results.

Initiatives are listed below by fiscal year of implementation, then in descending order of dollar value.

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EXAMPLES OF COST SAVINGS FOR FISCAL YEAR 1999

- Saved $7.5M through the site's employee-driven IDEAS program, where 4,000 employee cost savings were generated.

- Human Resources delivered FY99 cost savings and/or cost avoidances ($20.1M) greater than the total FY99 division budget ($13.3M). Major components were Medical/Dental Benefit Savings ($16.7M), Pension/Savings Plan Savings ($1.5M), Vacation Accrual Savings ($1.1M), and Time Bank implementation ($0.8M). (FY99)

- Saved $4.5M by treating over 250K gallons of CIF effluent at the Effluent Treatment Facility (ETF) instead of converting it to solid waste and disposing of it.

- $3.5M in costs were avoided by using temporary "contract attorneys" to review discovery requested documents at $25/hr versus law firm lawyers at $160/hr. The use of contract attorneys for such work has never before been done in any case at SRS. (PACE 242)

- Avoided over $3.0M in costs by negotiating and submitting the regulatory basis for relocation of the A-01 outfall that resulted in South Carolina Department of Health and Environmental Control (SCDHEC) approval.

- Rolled back over 18,000 square feet of Contamination Area/High Contamination Area for projected annual savings of over $2.7 million.

- Continued demonstration of the Asset for Services concept as a cost-effective method to disposition facilities and assets. In FY99, this program achieved $2.2 million in facility dismantling and removal actions (total of 29,000 square feet footprint reduction) for a contract cash outlay of approximately $430,000.

- Achieved $1.3M in productivity savings for Lab Tech Fundamentals training by utilizing "Challenge Test First - Formal Training As Needed Approach." There has been a 79% success rate on Math Module for the TA Challenge Test, which has reduced formal classroom training. (PACE 435)

- Achieved $1.0M in productivity savings by decreasing the frequency of required CAT (Consolidated Annual Training) training where allowed. In 1998, and in subsequent even-numbered years, CAT will consist of annually required, biennially required, and site-specific topics approved by the Training Oversight Committee (Level l's) and will include a GERT (General Employee Radiological Training) exam. (PACE 155)

- Achieved $500,000 in productivity savings by further reducing inventory in warehouses of existing stock items by continuous evaluation of min/max and site needs with the cooperation of field personnel. (PACE 302)

- Saved $500,000 in productivity improvements and cost reductions by restructuring SRTC project controls to use a graded approach for short life R&D equipment projects where appropriate. (PACE 226)

- Completed 508 pollution prevention projects from 1995 - 1999, saving ~$130M in life cycle costs for waste disposal, still leading the DOE Complex. This reduction in cost was primarily due to improved waste generator work practices including: improved employee awareness, substitution of reusable for consumable goods in radiological areas, enhanced work planning, non-hazardous solvent substitution, recovery of radiological areas, and use of new pollution prevention technologies.

- The cost effectiveness of several project teams was recognized by DOE in its Management Focus Area Chart. These include Storm Water Upgrades, K-Area Material Storage, Americium/Curium, and the Chiller projects.

- Achieved a Cost Performance Index of 1.03 for all project Line Item work in FY99 (Cost data through 2/99).

- Saved $2.5M by postponing renewal of the Microsoft Support Agreement and taking a commercial graded approach to computer software upgrades.

- Saved $1.4M by renegotiating the contract with the local utility supplier, South Carolina Electric & Gas, for reduced energy costs. (PACE 215)

- Saved $1.3M by replacing the current practice of many divisions maintaining and conducting training within their own division, by consolidating all training into one division, and thereby eliminating duplicate training positions. (PACE 175)

- Saved $1.3M by developing a mobile lab for analyzing headspace gases in transuranic waste drums prior to shipment to WIPP. Refurbishing an existing control trailer allowed development of the entire analytical capability for approximately $700K.

- Saved $900,000 by reducing or eliminating, where possible, shift turnover for mechanics, radcon inspectors, lab techs, and clerical employees in High Level Waste (HLW). The First Line Supervisor only will stay at shift turnover to provide data and information required at shift briefing. (PACE 248 & 249)

- Saved $900,000 in productivity improvements and cost reductions by developing a set of standardized financial reports for all support and line organizations to use on a monthly basis. This initiative also eliminated some casual overtime. (PACE 117)

- Saved $800,000 in productivity improvements and cost avoidances by renovating several rooms to allow waste assay and handling on the 6th level of HBLine, instead of the 5th Level, where it was all being done. (PACE 447)

- $800,000 was saved by cross training instructors to teach multiple courses for specific facilities. (PACE 467)

- Saved $700,000 by reusing B-25 waste containers used in low level waste sorting facility and supercompactor. (PACE 486)

- Saved $600,000 by reengineering financial processes, which included revision of the cost flow process, elimination of several service pools and creation of a new essential site services pool. (PACE 112)

- Saved $500,000 by revising the current purchase power contract between South Carolina Gas & Electric and DOE to allow up to 5000 kWh of electrical power to be purchased at a Real Time Price (RTP) rate. (PACE 57)

- Saved $500,000 by purchasing reconditioned drums instead of new drums for Solid Waste Division's Sort & Segregate Facility. (PACE 497)

- Saved $400,000 in productivity improvements by having the Area/Facility Emergency response employees (all shifts) complete their area specific annual Area Emergency Operations requalification exam on any SRS IBM compatible computer at their convenience. (PACE 174)

- Avoided $400,000 in costs by changing TNX Facility to Day only operations by allowing Site Utilities Department personnel to provide surveillance during off-hours (once per shift on nights and weekends). This includes installation of remote signaling and monitoring of key TNX alarms and equipment, installation of cipher lock for physical security measures, and establishment of protocol for "remote worker" to permit continued work activities by researchers. (PACE 434)

- $300,000 in costs was avoided by developing and implementing an automated qualification matrix for training scheduling and tracking. This has been implemented locally and has been released to a number of other divisions on site. Several queries from off-site have also been received with interest in implementing this. (PACE 32)

- Saved $300,000 in productivity improvements and cost reductions by reengineering the routine bioassay program and implementing a less frequent sampling and analysis process where allowed, e.g. annually instead of semi-annually. (PACE 157)

- Recognized by DOE's Federal Energy Management Program for implementing an innovative $20M Energy Savings Performance Contract. The first task order was submitted to DOE to cover $3.9M in A-Area upgrades.

- Recognized as a leader in Overhead management and selected by Booz-Allen consultants for a best practices benchmark study. The study rated WSRC "best in class" or "near best in class" for 50% of the elements that were evaluated. External commercial companies (IBM, Honeywell, Northrop Grumman, SAIC) and Lockheed Martin commercial and government companies were the other benchmark comparison companies.

EXAMPLES OF COST SAVINGS FOR FISCAL YEAR 2000

- Saved $43.5M from 10-1-99 through 9-30-00 through the site's employee-driven IDEAS program, where 4,167 employee cost savings were generated.

- WSRC was awarded the National Statistical SEER Award for Cost Savings (SEER = savings per 100 eligible employees ratio). WSRC's SEER ratio for FY00 was $962,000 submitted per employee (including IDEAS and PACE initiatives). The competition included companies such as General Motors, Honda, Exxon Mobil Oil, Toyota and American Express.

- WSRC was awarded the Industry Group SEER Award for Cost Savings. The competition included other federal and national government organizations. WSRC's

SEER ratio for FY00 was $962,000 submitted per employee (including IDEAS and PACE initiatives).

- WSRC was awarded two Best Practice Awards from the Center for Suggestion System Development. The two awards were for Successful Promotions and Return on Investment. WSRC's return on investment for FY00 was 17,700% ($323,595 was paid out in IDEAS and PACE awards and the savings achieved was $57.3M).

- Saved $4.1M in Hard Dollar Savings through employee-driven IDEAS. This was in addition to the $14.8M saved through IDEAS that didn't qualify as Hard Dollar Savings.

- Saved $7.2M in productivity improvements by combining the Consolidated Incineration Facility (CIF), Saltstone Facility (SSF) and the Effluent Treatment Facility (ETF) to improve organizational efficiency and personnel utilization through labor sharing. The combined strategy included cross training of personnel to work at multiple facilities, coordination of facility production schedules to permit personnel rotation, and reassignment of personnel not required to support consolidated facility operations to meet other site needs. (PACE 443)

- The ER Division will save approximately $5.7M over the next ten years with the following initiative. In cooperation with ISCO, Inc. and the 3M Company, an automatic field sampler was developed that collects composite water samples from surface streams and processes the water in the field at the time of collection.

- Avoided $5.6M in costs in the Tritium Modernization and Consolidation Project by improving the heat transfer in the TCAP (Thermal Cyclic Absorption Process) column, which improved its capacity. (PACE SRTC23)

- $5.3M in costs were avoided by installing portable HVAC units instead of permanent units to monitor tank vapor space for hydrogen and exhaust gases for radionuclides during waste tank removal operations. (PACE 454)

- An Assets for Services (AFS) package was developed to dismantle and remove the 284-F Powerhouse. The AFS approach is projected to save over $1.5M of the estimated cost to dismantle and remove the facility.

- Saved $1.7M by using Lift Liners to package soils, process pipe and chipped vegetation for disposal at Envirocare, an offsite waste disposal company. Lift Liners are 9.5 cubic yard flexible, durable, double liners that are superior to B-12 rigid metal boxes for waste disposal because they require less disposal space, have less void space and therefore result in reduced disposal costs. (PACE ER14)

- Installation of Primary Vessel Vent Fan #2 in F-Canyon was completed six months early and $1.5M under budget.

- Saved $1.3M by consolidating Solid Waste Division's Effluent Treatment Facility (ETF) laboratory with the Consolidated Incinerator Facility (CIF) laboratory and eliminating the CIF laboratory subcontractor. (PACE 442)

- Saved $1.1M from efforts in H-Area to decontaminate potentially hazardous material in the Uranium Solidification Facility (USF) so it could be free released as low level waste instead of hazardous material. (PACE NMSS54)

- Saved $900,000 in cost reductions and productivity improvements by implementing an Asset Information Management System (AIMS) which provides a computerized work environment that allows electronic retrieval of procedures, equipment records and other important documents. This engineering tool greatly improves the efficiency of facility personnel. (PACE DP30)

- Realized $800,000 in inventory cost savings – included savings of $289K by eliminating duplicate items and reducing min/max levels, $475K by eliminating or restricting non-essential items and $64K by reutilizing onsite excess chemical material.

- Saved $800,000 by negotiating the Bell Atlantic Federal Integrated Solutions contract to operate the SRS telephone system through June 2005.

- Saved $600,000 by reducing the Johnson Controls contract and assimilating corrective maintenance orders into CSWE (Central Services Works Engineering) work scope. (PACE AID04 & AID12)

- Saved $460,000 on Project S-6064 by eliminating all welding, grinding and drilling into concrete in regulated areas during construction and with an innovative test procedure on existing anchors in regulated areas. These improvements eliminated the need for plastic suit work, plastic huts, and the need for fresh air hoods. (PACE TSD092)

- Saved $444,000 by using encapsulation fogging, a new technology, in the decommissioning and removal (D&R) of equipment from FB-Line. Encapsulation fogging allows for plastic suits to be removed as low level waste (LLW) rather than transuranic waste (TRU) during the D&R of equipment. (PACE NMSS56)

- Saved $300,000 by redeploying computer assets to 190 customers across the site.

- Saved $296,000 by legitimately reclassifying spent degreasing solvents and radiological contaminants received by the Low Level Waste Basin. This initiative used flexibility in the regulations to reclassify material formerly considered to be hazardous waste to low level waste with the approval of EPA and South Carolina DHEC. (PACE SW19)

- Avoided $222,000 in Project S-4404 costs by using heavy wall pipe in F Area, which provides intrinsic tornado missile protection and eliminates heavy grating or plate boxes, and by routing a raceway underground in H Area, which eliminated all elevated supports and missile shielding. (PACE PECD15)

- Saved $200,000 when Central Services Works Engineering (CSWE) assumed sitewide sanitary waste hauling from a vendor. This was a result of a make or buy analysis. (PACE 67)

- Transferred a Xerox Docutech demand printer to DOE-HQ, which saved DOE $55K/yr by canceling the demand printer lease plus another $275K over the life of the machine and saved WSRC $50K/yr by eliminating equipment maintenance costs.

- WSRC and Wausau negotiated a Service Plan Agreement for the Workers Compensation Contract. The new streamlined process between the two companies has resulted in a significant reduction in overall Workers Compensation costs. In addition, the monthly premium payments have been substantially reduced, saving projected payments of approximately $375,000.

- Saved $283,000 through the innovation of a HEPA-filtered Dust Collector that provides a containment and filtering system required to drill into highly contaminated surfaces. This innovation provides the following advantages: the portability of the system speeds up work which saves both time and personal exposure, and the downgrade of protective clothing requirements enhances worker safety (less heat stress) and reduces waste. (PACE ESH55)

- The ER Cost Performance Index has been consistently above 1.10 and there are future cost savings of $11M due to regulatory negotiations and operations efficiencies. The ER Cost Performance Index measure earned value, e.g. 1.10 indicates all the work was accomplished for 10% less than what was budgeted.

- Maintained routine administrative building maintenance cost per square foot within 10% or less of commercial average, which is $2.09.

- Completed a Make or Buy analysis on WSRC facilities administration and planning costs which demonstrated that SRS costs, $9.33/ft^2, are significantly lower than the industry average, $12.40/ft^2.

- Saved $8.5M in FY00 and $28M in FY01 by reengineering maintenance processes. Improvements include standardized scheduled, outsourcing selected functions, reductions in overtime, streamlined training, graded approach in planning and executing safety significant work, organizational consolidation, resource sharing, and enhanced performance indicators. (PACE TSD107)

- Saved $4.8M by consolidating the High level Waste Division Pretreatment Facility and the H-Tank Farm Facility organizations. This initiative reduced duplication of management and administrative personnel. (PACE HLW12)

- Saved $2.4M in costs by consolidating 9 Field Procurement Engineering Groups and 11 Material Access Centers under a single management authority for greater efficiency, higher quality products and lower costs. (PACE AID81)

- Saved $1.8M by combining functions in the High level Waste Training Department while maintaining the ability to execute current scope. (PACE HLW34)

- Achieved $1.7M in productivity improvements by optimizing the review and approval process for site procedures governed by WSRC 2S, Conduct of Operations. Improvements include electronic reviews and approvals, use of vendor manuals, reduction of frequency of reviews required for many procedures, providing methods to use skill of craft, and streamlined processes for procedure revisions. (PACE FMC03)

- Saved $1.6M by realigning the QA Department in the High Level Waste Division to allow for cross-divisional performance instead of performance that was aligned more to the operating departments. (PACE HLW32)

- Saved $1.4M in DWPF (Defense Waste Processing Facility) by eliminating the fifth shift of operations personnel. (PACE HLW33)

- Saved $1.3M in sitewide training costs by creating and enforcing stringent guidelines for attendance of offsite training courses. (PACE ESH19)

- Achieved $1.3M in cost avoidances and productivity improvements by redefining the requirements for Use Every Time (UET) procedures. UET procedures will be used for critical activities, and where allowable, they will be used less for other activities. (PACE ESH23)

- Saved $900,000 in safety-related procurement by improving the commercial grade dedication process. Material purchases are now based on lot sampling instead of individual sampling to minimize material destroyed in testing. Level 1 suppliers are also emphasized for new projects. (PACE AID39)

- Saved $946K by standardizing Programmable Logic Controllers (PLC's), which saved costs in hardware, product training and spare parts inventory. (PACE PECD32)

- Avoided $500,000 by initiating a graded approach to reviews made by the Facility Evaluation Board (FEB) which decreased the frequency of reviews for low hazard facilities where allowable. (PACE FDD02)

- Saved $488,000 by expanding the strategic sourcing initiative in Procurement. (PACE AID38)

- Saved $449,000 by leasing a newer, downsized mainframe computer and associated disk storage devices. This action reduced software maintenance costs, lowered hardware maintenance fees, and resulted in fewer support personnel. (PACE AID64)

- Avoided $400,000 in costs in HB-Line by legitimately recategorizing fresh air hoods and hoses from low level waste to clean waste. (PACE NMSS41)

- Saved $211,000 by having the Procurement Quality Assurance Department conduct some of the supplier surveillances currently performed by a subcontractor. (PACE TSD079)

- Positive Comments were made in the Executive Summary of the Independent Assessment of DOE's Savannah River Site by Logistics Management Institute. "Cost containment strategies have been used effectively by WSRC. Commercialization efforts, such as contracting for certain IT functions and leasing, rather than purchasing, when hardware must be replaced, are excellent developments."

- Achieved $90,000 in productivity improvements by transitioning to totally electronic system for submitting IDEAS (Individuals Developing Effective Alternative Solutions). (PACE AID45)

- Avoided $2.1M in costs by improving the efficiency of the CE/GPP (Capital Equipment/General Plant Project) planning and execution processes by placing emphasis on the following focus areas: shorten project cycle time, simplify planning estimates, eliminate final RPA (Request for Project Authorization) modifications, prepare TEP's (Team Execution Plans) only on selected projects, combine project scopes, improve project execution planning, and avoid project starts/stops. (PACE PECD29)